

ABSTRACT OF THE DISCLOSURE

LIGANDS DIRECTED TO THE NON-SECRETORY COMPONENT, NON-STALK REGION OF pIgR AND METHODS OF USE THEREOF

The invention provides compositions and methods for specific binding to a
5 region of the polymeric immunoglobulin receptor (pIgR) of a cell with the provisos that the
ligand does not substantially bind to the most abundant form of the secretory component (SC)
of pIgR present in an organ of interest of an animal of interest under physiological conditions,
and does not bind to the pIgR stalk. In some embodiments, the ligand decreases cleavage of
SC from the stalk by at least one-third. The ligands and methods of the invention can be used
10 with both birds and mammals. In more preferred embodiments, the animal is a mammal. In
the most preferred embodiment, the animal is a human. The ligand may be targeted into the
cell or may undergo retrograde transcytosis and release at the basolateral side of the cell, and
may comprise a biologically active composition.